

7/23/2015
Ms. Cecilia Greene
Auxier & Associates, Inc.
9821 Cogdill Road, Suite 1

Knoxville TN 37932

Project Name: Westlake Landfill
Project #:
Workorder #: 1507137

Dear Ms. Cecilia Greene

The following report includes the data for the above referenced project for sample(s) received on 7/10/2015 at Air Toxics Ltd.

The data and associated QC analyzed by Passive S.E. RAD130/SKC are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kelly Buettner at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Kelly Buettner
Project Manager

A Eurofins Lancaster Laboratories Company

WORK ORDER #: 1507137

Work Order Summary

CLIENT:	Ms. Cecilia Greene Auxier & Associates, Inc. 9821 Cogdill Road, Suite 1 Knoxville, TN 37932	BILL TO:	Ms. Cecilia Greene Auxier & Associates, Inc. 9821 Cogdill Road, Suite 1 Knoxville, TN 37932
PHONE:	865-675-3669	P.O. #	
FAX:	865-675-3677	PROJECT #	Westlake Landfill
DATE RECEIVED:	07/10/2015	CONTACT:	Kelly Buettner
DATE COMPLETED:	07/23/2015		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	ENGWESA001	Passive S.E. RAD130/SKC
02A	ENGWESA005	Passive S.E. RAD130/SKC
03A	ENGWESA007	Passive S.E. RAD130/SKC
04A	ENGWESA008	Passive S.E. RAD130/SKC
05A	ENGWESA011	Passive S.E. RAD130/SKC
06A	Duplicate	Passive S.E. RAD130/SKC
07A	Lab Blank	Passive S.E. RAD130/SKC
08A	LCS	Passive S.E. RAD130/SKC
08AA	LCSD	Passive S.E. RAD130/SKC

CERTIFIED BY:



DATE: 07/23/15

Technical Director

**LABORATORY NARRATIVE
Passive SE GC/MS
Auxier & Associates, Inc.
Workorder# 1507137**

Six Radiello 130 (Solvent) samples were received on July 10, 2015. The laboratory extracted the charcoal sorbent bed of the passive sampler using carbon disulfide. An aliquot of the extract was injected into a GC/MS for identification and quantification of volatile organic compounds (VOCs).

The mass of each target compound adsorbed by the sampler was converted to units of concentration using the sample deployment time and the sampling rate for each VOC. If sampling rates were calculated by the lab or the manufacturer, the concentration result has been flagged as an estimated value. Results are not corrected for desorption efficiency.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The uptake rates were corrected based on average field temperatures if provided. In the absence of field temperatures, the uptake rates determined at 25 deg C were used.

To calculate ug/m³ concentrations in the Lab Blank, a sampling duration of 21892 minutes was applied. The assumed temperature used for the uptake rate is listed on the data page. If the field temperatures were provided, the rate was adjusted in the same manner as the field samples.

Definition of Data Qualifying Flags

Nine qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

C - Estimated concentration due to calculated sampling rate

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue



Air Toxics

Summary of Detected Compounds

VOCS BY PASSIVE SAMPLER - GC/MS

Client Sample ID: ENGWESA001

Lab ID#: 1507137-01A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.13	0.24	0.15
Hexane	0.10	0.074	0.46	0.34
2-Butanone (Methyl Ethyl Ketone)	0.10	0.062	0.28	0.18
Carbon Tetrachloride	0.10	0.073	0.35	0.26
Benzene	0.40	0.24	0.45	0.28
Heptane	0.10	0.084	0.33	0.28
Toluene	0.10	0.066	0.83	0.55
Tetrachloroethene	0.10	0.083	0.29	0.24
Ethyl Benzene	0.10	0.072	0.12	0.088
m,p-Xylene	0.10	0.070	0.36	0.25
o-Xylene	0.10	0.075	0.11	0.082

Client Sample ID: ENGWESA005

Lab ID#: 1507137-02A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.12	0.31	0.18
2-Propanol	0.20	0.18	0.23	0.21
Hexane	0.10	0.069	2.9	2.0
2-Butanone (Methyl Ethyl Ketone)	0.10	0.058	0.34	0.20
Cyclohexane	0.10	0.085	0.12	0.10
Carbon Tetrachloride	0.10	0.068	0.30	0.20
Benzene	0.40	0.23	0.51	0.29
Heptane	0.10	0.079	0.24	0.19
Toluene	0.10	0.062	31	19
Ethyl Benzene	0.10	0.067	0.21	0.14
m,p-Xylene	0.10	0.065	0.58	0.38
o-Xylene	0.10	0.070	0.17	0.12

Client Sample ID: ENGWESA007

Lab ID#: 1507137-03A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)



Air Toxics

Summary of Detected Compounds VOCS BY PASSIVE SAMPLER - GC/MS

Client Sample ID: ENGWESA007**Lab ID#: 1507137-03A**

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.12	0.26	0.16
Hexane	0.10	0.069	0.39	0.27
Ethyl Acetate	0.40	0.23	0.50	0.29
2-Butanone (Methyl Ethyl Ketone)	0.10	0.058	0.37	0.21
Cyclohexane	0.10	0.084	0.11	0.094
Carbon Tetrachloride	0.10	0.068	0.33	0.22
Benzene	0.40	0.23	0.56	0.32
Heptane	0.10	0.079	0.31	0.24
Toluene	0.10	0.062	1.4	0.86
Tetrachloroethene	0.10	0.077	0.11	0.086
Ethyl Benzene	0.10	0.067	0.19	0.13
m,p-Xylene	0.10	0.065	0.58	0.38
o-Xylene	0.10	0.070	0.18	0.13

Client Sample ID: ENGWESA008**Lab ID#: 1507137-04A**

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.12	0.31	0.19
2-Propanol	0.20	0.18	0.27	0.24
Hexane	0.10	0.069	0.42	0.29
2-Butanone (Methyl Ethyl Ketone)	0.10	0.058	0.39	0.23
Carbon Tetrachloride	0.10	0.068	0.37	0.25
Benzene	0.40	0.23	0.64	0.37
Heptane	0.10	0.079	0.30	0.23
Toluene	0.10	0.062	1.0	0.62
Ethyl Benzene	0.10	0.067	0.20	0.14
m,p-Xylene	0.10	0.065	0.56	0.37
o-Xylene	0.10	0.070	0.16	0.12

Client Sample ID: ENGWESA011**Lab ID#: 1507137-05A**

Summary of Detected Compounds VOCS BY PASSIVE SAMPLER - GC/MS

Client Sample ID: ENGWESA011

Lab ID#: 1507137-05A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.12	0.27	0.16
Hexane	0.10	0.070	0.34	0.24
2-Butanone (Methyl Ethyl Ketone)	0.10	0.058	0.38	0.22
Carbon Tetrachloride	0.10	0.068	0.31	0.21
Benzene	0.40	0.23	0.51	0.29
Heptane	0.10	0.079	0.18	0.14
Toluene	0.10	0.062	0.94	0.58
Ethyl Benzene	0.10	0.068	0.17	0.11
m,p-Xylene	0.10	0.066	0.47	0.31
o-Xylene	0.10	0.071	0.14	0.098

Client Sample ID: Duplicate

Lab ID#: 1507137-06A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.12	0.27	0.16
Hexane	0.10	0.070	0.49	0.34
2-Butanone (Methyl Ethyl Ketone)	0.10	0.058	0.42	0.24
Carbon Tetrachloride	0.10	0.068	0.28	0.19
Benzene	0.40	0.23	0.51	0.29
Heptane	0.10	0.079	0.21	0.16
Toluene	0.10	0.062	1.0	0.62
Ethyl Benzene	0.10	0.068	0.17	0.12
m,p-Xylene	0.10	0.066	0.46	0.30
o-Xylene	0.10	0.071	0.15	0.10



Air Toxics

Client Sample ID: ENGWESA001

Lab ID#: 1507137-01A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	10071319sim	Date of Collection: 7/8/15 3:33:00 PM		
Dil. Factor:	1.00	Date of Analysis: 7/13/15 04:41 PM		
		Date of Extraction: 7/13/15		
Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Ethanol	1.0	0.48	Not Detected	Not Detected
Acetone	0.20	0.13	0.24	0.15
2-Propanol	0.20	0.19	Not Detected	Not Detected
Methyl tert-butyl ether	0.10	0.075	Not Detected	Not Detected
Hexane	0.10	0.074	0.46	0.34
Ethyl Acetate	0.40	0.25	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.10	0.062	0.28	0.18
Chloroform	0.10	0.065	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.079	Not Detected	Not Detected
Cyclohexane	0.10	0.091	Not Detected	Not Detected
Carbon Tetrachloride	0.10	0.073	0.35	0.26
Benzene	0.40	0.24	0.45	0.28
1,2-Dichloroethane	0.10	0.064	Not Detected	Not Detected
Heptane	0.10	0.084	0.33	0.28
Trichloroethene	0.10	0.071	Not Detected	Not Detected
4-Methyl-2-pentanone	0.20	0.15	Not Detected	Not Detected
Toluene	0.10	0.066	0.83	0.55
Tetrachloroethylene	0.10	0.083	0.29	0.24
Chlorobenzene	0.10	0.072	Not Detected	Not Detected
Ethyl Benzene	0.10	0.072	0.12	0.088
m,p-Xylene	0.10	0.070	0.36	0.25
o-Xylene	0.10	0.075	0.11	0.082
Styrene	0.10	0.080	Not Detected	Not Detected
Propylbenzene	0.10	0.086	Not Detected	Not Detected
1,4-Dichlorobenzene	0.10	0.096	Not Detected	Not Detected
Naphthalene	0.10	0.20	Not Detected	Not Detected

Temperature = 77.0F , duration time = 20383 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130



Air Toxics

Client Sample ID: ENGWESA005

Lab ID#: 1507137-02A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	10071320sim	Date of Collection:	7/8/15 3:13:00 PM	
Dil. Factor:	1.00	Date of Analysis:	7/13/15 05:04 PM	
		Date of Extraction:	7/13/15	
Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Ethanol	1.0	0.45	Not Detected	Not Detected
Acetone	0.20	0.12	0.31	0.18
2-Propanol	0.20	0.18	0.23	0.21
Methyl tert-butyl ether	0.10	0.070	Not Detected	Not Detected
Hexane	0.10	0.069	2.9	2.0
Ethyl Acetate	0.40	0.23	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.10	0.058	0.34	0.20
Chloroform	0.10	0.061	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.074	Not Detected	Not Detected
Cyclohexane	0.10	0.085	0.12	0.10
Carbon Tetrachloride	0.10	0.068	0.30	0.20
Benzene	0.40	0.23	0.51	0.29
1,2-Dichloroethane	0.10	0.059	Not Detected	Not Detected
Heptane	0.10	0.079	0.24	0.19
Trichloroethene	0.10	0.066	Not Detected	Not Detected
4-Methyl-2-pentanone	0.20	0.14	Not Detected	Not Detected
Toluene	0.10	0.062	31	19
Tetrachloroethylene	0.10	0.078	Not Detected	Not Detected
Chlorobenzene	0.10	0.067	Not Detected	Not Detected
Ethyl Benzene	0.10	0.067	0.21	0.14
m,p-Xylene	0.10	0.065	0.58	0.38
o-Xylene	0.10	0.070	0.17	0.12
Styrene	0.10	0.075	Not Detected	Not Detected
Propylbenzene	0.10	0.080	Not Detected	Not Detected
1,4-Dichlorobenzene	0.10	0.090	Not Detected	Not Detected
Naphthalene	0.10	0.18	Not Detected	Not Detected

Temperature = 77.0F , duration time = 21863 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130



Air Toxics

Client Sample ID: ENGWESA007

Lab ID#: 1507137-03A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	10071321sim	Date of Collection:	7/8/15 2:57:00 PM	
Dil. Factor:	1.00	Date of Analysis:	7/13/15 05:28 PM	
		Date of Extraction:	7/13/15	
Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Ethanol	1.0	0.45	Not Detected	Not Detected
Acetone	0.20	0.12	0.26	0.16
2-Propanol	0.20	0.18	Not Detected	Not Detected
Methyl tert-butyl ether	0.10	0.070	Not Detected	Not Detected
Hexane	0.10	0.069	0.39	0.27
Ethyl Acetate	0.40	0.23	0.50	0.29
2-Butanone (Methyl Ethyl Ketone)	0.10	0.058	0.37	0.21
Chloroform	0.10	0.061	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.074	Not Detected	Not Detected
Cyclohexane	0.10	0.084	0.11	0.094
Carbon Tetrachloride	0.10	0.068	0.33	0.22
Benzene	0.40	0.23	0.56	0.32
1,2-Dichloroethane	0.10	0.059	Not Detected	Not Detected
Heptane	0.10	0.079	0.31	0.24
Trichloroethene	0.10	0.066	Not Detected	Not Detected
4-Methyl-2-pentanone	0.20	0.14	Not Detected	Not Detected
Toluene	0.10	0.062	1.4	0.86
Tetrachloroethylene	0.10	0.077	0.11	0.086
Chlorobenzene	0.10	0.067	Not Detected	Not Detected
Ethyl Benzene	0.10	0.067	0.19	0.13
m,p-Xylene	0.10	0.065	0.58	0.38
o-Xylene	0.10	0.070	0.18	0.13
Styrene	0.10	0.075	Not Detected	Not Detected
Propylbenzene	0.10	0.080	Not Detected	Not Detected
1,4-Dichlorobenzene	0.10	0.090	Not Detected	Not Detected
Naphthalene	0.10	0.18	Not Detected	Not Detected

Temperature = 77.0F , duration time = 21892 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130



Air Toxics

Client Sample ID: ENGWESA008

Lab ID#: 1507137-04A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	10071322sim	Date of Collection:	7/8/15 3:23:00 PM	
Dil. Factor:	1.00	Date of Analysis:	7/13/15 05:51 PM	
		Date of Extraction:	7/13/15	
Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Ethanol	1.0	0.45	Not Detected	Not Detected
Acetone	0.20	0.12	0.31	0.19
2-Propanol	0.20	0.18	0.27	0.24
Methyl tert-butyl ether	0.10	0.070	Not Detected	Not Detected
Hexane	0.10	0.069	0.42	0.29
Ethyl Acetate	0.40	0.24	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.10	0.058	0.39	0.23
Chloroform	0.10	0.061	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.074	Not Detected	Not Detected
Cyclohexane	0.10	0.085	Not Detected	Not Detected
Carbon Tetrachloride	0.10	0.068	0.37	0.25
Benzene	0.40	0.23	0.64	0.37
1,2-Dichloroethane	0.10	0.060	Not Detected	Not Detected
Heptane	0.10	0.079	0.30	0.23
Trichloroethene	0.10	0.066	Not Detected	Not Detected
4-Methyl-2-pentanone	0.20	0.14	Not Detected	Not Detected
Toluene	0.10	0.062	1.0	0.62
Tetrachloroethylene	0.10	0.078	Not Detected	Not Detected
Chlorobenzene	0.10	0.067	Not Detected	Not Detected
Ethyl Benzene	0.10	0.067	0.20	0.14
m,p-Xylene	0.10	0.065	0.56	0.37
o-Xylene	0.10	0.070	0.16	0.12
Styrene	0.10	0.075	Not Detected	Not Detected
Propylbenzene	0.10	0.080	Not Detected	Not Detected
1,4-Dichlorobenzene	0.10	0.090	Not Detected	Not Detected
Naphthalene	0.10	0.18	Not Detected	Not Detected

Temperature = 77.0F , duration time = 21815 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130



Air Toxics

Client Sample ID: ENGWESA011

Lab ID#: 1507137-05A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	10071323sim	Date of Collection:	7/8/15 2:44:00 PM	
Dil. Factor:	1.00	Date of Analysis:	7/13/15 06:15 PM	
		Date of Extraction:	7/13/15	
Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Ethanol	1.0	0.45	Not Detected	Not Detected
Acetone	0.20	0.12	0.27	0.16
2-Propanol	0.20	0.18	Not Detected	Not Detected
Methyl tert-butyl ether	0.10	0.071	Not Detected	Not Detected
Hexane	0.10	0.070	0.34	0.24
Ethyl Acetate	0.40	0.24	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.10	0.058	0.38	0.22
Chloroform	0.10	0.061	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.074	Not Detected	Not Detected
Cyclohexane	0.10	0.085	Not Detected	Not Detected
Carbon Tetrachloride	0.10	0.068	0.31	0.21
Benzene	0.40	0.23	0.51	0.29
1,2-Dichloroethane	0.10	0.060	Not Detected	Not Detected
Heptane	0.10	0.079	0.18	0.14
Trichloroethene	0.10	0.066	Not Detected	Not Detected
4-Methyl-2-pentanone	0.20	0.14	Not Detected	Not Detected
Toluene	0.10	0.062	0.94	0.58
Tetrachloroethylene	0.10	0.078	Not Detected	Not Detected
Chlorobenzene	0.10	0.068	Not Detected	Not Detected
Ethyl Benzene	0.10	0.068	0.17	0.11
m,p-Xylene	0.10	0.066	0.47	0.31
o-Xylene	0.10	0.071	0.14	0.098
Styrene	0.10	0.075	Not Detected	Not Detected
Propylbenzene	0.10	0.081	Not Detected	Not Detected
1,4-Dichlorobenzene	0.10	0.090	Not Detected	Not Detected
Naphthalene	0.10	0.18	Not Detected	Not Detected

Temperature = 77.0F , duration time = 21764 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130



Air Toxics

Client Sample ID: Duplicate

Lab ID#: 1507137-06A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	10071324sim	Date of Collection:	7/8/15 2:44:00 PM	
Dil. Factor:	1.00	Date of Analysis:	7/13/15 06:38 PM	
		Date of Extraction:	7/13/15	
Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Ethanol	1.0	0.45	Not Detected	Not Detected
Acetone	0.20	0.12	0.27	0.16
2-Propanol	0.20	0.18	Not Detected	Not Detected
Methyl tert-butyl ether	0.10	0.071	Not Detected	Not Detected
Hexane	0.10	0.070	0.49	0.34
Ethyl Acetate	0.40	0.24	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.10	0.058	0.42	0.24
Chloroform	0.10	0.061	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.074	Not Detected	Not Detected
Cyclohexane	0.10	0.085	Not Detected	Not Detected
Carbon Tetrachloride	0.10	0.068	0.28	0.19
Benzene	0.40	0.23	0.51	0.29
1,2-Dichloroethane	0.10	0.060	Not Detected	Not Detected
Heptane	0.10	0.079	0.21	0.16
Trichloroethene	0.10	0.066	Not Detected	Not Detected
4-Methyl-2-pentanone	0.20	0.14	Not Detected	Not Detected
Toluene	0.10	0.062	1.0	0.62
Tetrachloroethylene	0.10	0.078	Not Detected	Not Detected
Chlorobenzene	0.10	0.068	Not Detected	Not Detected
Ethyl Benzene	0.10	0.068	0.17	0.12
m,p-Xylene	0.10	0.066	0.46	0.30
o-Xylene	0.10	0.071	0.15	0.10
Styrene	0.10	0.075	Not Detected	Not Detected
Propylbenzene	0.10	0.081	Not Detected	Not Detected
1,4-Dichlorobenzene	0.10	0.090	Not Detected	Not Detected
Naphthalene	0.10	0.18	Not Detected	Not Detected

Temperature = 77.0F , duration time = 21764 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1507137-07A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	10071307sim	Date of Collection: NA		
Dil. Factor:	1.00	Date of Analysis: 7/13/15 11:48 AM		
		Date of Extraction: 7/13/15		
Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Ethanol	1.0	0.45	Not Detected	Not Detected
Acetone	0.20	0.12	Not Detected	Not Detected
2-Propanol	0.20	0.18	Not Detected	Not Detected
Methyl tert-butyl ether	0.10	0.070	Not Detected	Not Detected
Hexane	0.10	0.069	Not Detected	Not Detected
Ethyl Acetate	0.40	0.23	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.10	0.058	Not Detected	Not Detected
Chloroform	0.10	0.061	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.074	Not Detected	Not Detected
Cyclohexane	0.10	0.084	Not Detected	Not Detected
Carbon Tetrachloride	0.10	0.068	Not Detected	Not Detected
Benzene	0.40	0.23	Not Detected	Not Detected
1,2-Dichloroethane	0.10	0.059	Not Detected	Not Detected
Heptane	0.10	0.079	Not Detected	Not Detected
Trichloroethene	0.10	0.066	Not Detected	Not Detected
4-Methyl-2-pentanone	0.20	0.14	Not Detected	Not Detected
Toluene	0.10	0.062	Not Detected	Not Detected
Tetrachloroethylene	0.10	0.077	Not Detected	Not Detected
Chlorobenzene	0.10	0.067	Not Detected	Not Detected
Ethyl Benzene	0.10	0.067	Not Detected	Not Detected
m,p-Xylene	0.10	0.065	Not Detected	Not Detected
o-Xylene	0.10	0.070	Not Detected	Not Detected
Styrene	0.10	0.075	Not Detected	Not Detected
Propylbenzene	0.10	0.080	Not Detected	Not Detected
1,4-Dichlorobenzene	0.10	0.090	Not Detected	Not Detected
Naphthalene	0.10	0.18	Not Detected	Not Detected

Temperature = 77.0F , duration time = 21892 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130



Air Toxics

Client Sample ID: LCS

Lab ID#: 1507137-08A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	10071305sim	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	7/13/15 11:00 AM
		Date of Extraction:	7/13/15

Compound	%Recovery	Method Limits
Ethanol	106	50-130
Acetone	110	70-130
2-Propanol	109	50-130
Methyl tert-butyl ether	105	70-130
Hexane	120	70-130
Ethyl Acetate	96	70-130
2-Butanone (Methyl Ethyl Ketone)	96	70-130
Chloroform	94	70-130
1,1,1-Trichloroethane	86	70-130
Cyclohexane	93	70-130
Carbon Tetrachloride	92	70-130
Benzene	99	70-130
1,2-Dichloroethane	93	70-130
Heptane	106	70-130
Trichloroethene	90	70-130
4-Methyl-2-pentanone	96	70-130
Toluene	93	70-130
Tetrachloroethylene	96	70-130
Chlorobenzene	86	70-130
Ethyl Benzene	96	70-130
m,p-Xylene	94	70-130
o-Xylene	84	70-130
Styrene	61	20-100
Propylbenzene	96	70-130
1,4-Dichlorobenzene	90	50-110
Naphthalene	13	5-80

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130



Air Toxics

Client Sample ID: LCSD

Lab ID#: 1507137-08AA

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	10071306sim	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	7/13/15 11:23 AM
		Date of Extraction:	7/13/15

Compound	%Recovery	Method Limits
Ethanol	115	50-130
Acetone	118	70-130
2-Propanol	118	50-130
Methyl tert-butyl ether	110	70-130
Hexane	124	70-130
Ethyl Acetate	105	70-130
2-Butanone (Methyl Ethyl Ketone)	103	70-130
Chloroform	112	70-130
1,1,1-Trichloroethane	94	70-130
Cyclohexane	96	70-130
Carbon Tetrachloride	87	70-130
Benzene	115	70-130
1,2-Dichloroethane	94	70-130
Heptane	127	70-130
Trichloroethene	93	70-130
4-Methyl-2-pentanone	98	70-130
Toluene	93	70-130
Tetrachloroethylene	97	70-130
Chlorobenzene	84	70-130
Ethyl Benzene	92	70-130
m,p-Xylene	95	70-130
o-Xylene	84	70-130
Styrene	62	20-100
Propylbenzene	98	70-130
1,4-Dichlorobenzene	87	50-110
Naphthalene	12	5-80

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130